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# Social and Economic Report

## Lover's Canyon

Salmon/Scott River Ranger District, Klamath National Forest

Siskiyou County, California

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## Introduction

The purpose of this report is to analyze the effects of the Lover's Canyon Project on social and economic health, and identify any disproportionate effects to minorities and disadvantaged groups, in Siskiyou County.

Resource management activities conducted on the Klamath National Forest (Forest) produce an effect on the socioeconomic environment; not conducting management activities also has an effect. The economic effects section of this report will focus on resource outputs, particularly timber. The economic impacts of timber harvest are generally quantifiable, while corresponding effects on non-commodity resources values are not generally quantifiable in monetary terms and are not included in the economic analysis. The social effects analyzed are primarily effects to civil rights, environmental justice, and safety of communities.

## Regulatory Framework

Direction related to social variables is provided in the Executive Order 12898 on Environmental Justice and the USDA Civil Rights policy as well as in the Forest Plan. The Forest Plan includes a Forest-wide goal to promote the economic stability of local communities (Forest Plan page 4-9). For information on the Forest social and economic environment at the time the Forest Plan was signed, refer to the Forest Plan EIS (USDA Forest Service 1995b), Chapter III (3-130 to 3-139) and Chapter IV (4-159 to 4-165). For more recent information, see Socioeconomic Monitoring of the first 10 years of the Northwest Forest Plan (USDA 2008).

At a larger scale, a detailed assessment of social and economic conditions within communities that have traditionally been dependent on timber resources is contained in the report of the Forest Ecosystem Management Assessment Team (FEMAT), Forest Ecosystem Management: An Ecological, Economic, and Social Assessment, July 1993, Chapters VI and VII (pages 48 - 81)). For more recent information, see Social and Economic Status and Trends of the first 20 years of the Northwest Forest Plan (USDA 2016).

The Forest Plan (1995a) provides Forest-wide standards and guidelines related to social and economic concerns (pages 4-64 and 4-65); for Management Area (MA) allocations, standards and guidelines related to economics include the following (emphasis added):

- MA11-10 (Retention Visual Quality Objective): directs the Forest to **schedule moderate timber yields**, compatible with area goals.
- MA13-16 (Designated and Recommended Recreational Rivers (Wild and Scenic Rivers)): directs the Forest to **schedule moderate timber yields**, compatible with area goals.
- MA 15-11 (Partial Retention Visual Quality Objective): directs the forest to **schedule moderate timber yields**, compatible with area goals.
- MA 17-10 (General Forest): directs the forest to **schedule moderate timber yields**, compatible with area goals.
- MA 5 (Special Habitat--Late Successional Reserves): Although economics are not a primary driver, silvicultural treatments that are beneficial to the creation of late-successional forest

conditions (MA 5-26) and treatments that reduce risk of large-scale disturbance (MA 5-27 through MA 5-30) are permitted; these contribute to economic effects..

## **Methodology**

### ***Social***

#### **Analysis Indicators and Methodology**

##### **Analysis Indicators**

The indicators used for the social analysis include lifestyles, values, beliefs, health and safety of individuals and communities. For this project, there are two measures for evaluating the effects of the project on quality of life for Siskiyou County residents:

1. The value of using the resources of the Forest, and project area in particular, for the benefit of county residents (Siskiyou County 1996). This will be analyzed by the jobs provided and value of the estimated volume of timber products the action alternatives will produce. Other beneficial uses are discussed in other resource reports, especially in the aquatic resources, hydrology, recreation and wildlife reports.
2. Changes to the “fire-safe character of communities” in the project area (Lower Scott River Fire Safe Council 2012). This will be analyzed by the acres of treatment, primarily fuels treatments, and acres of treatments in the wildland urban interface in each alternative. It is assumed that treatments, primarily but not exclusively fuels treatments, have the indirect effect of creating more fire-safe communities (see the Fire and Fuels Resource Report).

##### **Methodology**

Information from federal data sources is used to compare the social status of Siskiyou County to the State of California and the United States to provide background information for effects of the project on minorities and disadvantaged groups. The Economic Profile System, Human Dimensions Toolbox (Headwaters Economics 2016a), compiles statistics from federal data sources and is used as a source of information for this analysis.

Social and Civil Rights analysis is based on the quality of life of people affected by this project (Executive Order 12898 on Environmental Justice and USDA Civil Rights Policy). Safety is an important value to people in Siskiyou County and an important part of quality of life; therefore, one purpose of this analysis is to gain a better understanding of how safety relates to the purpose and need of this project and its proposed actions. Quality of life also depends on an economic element, for people to sustain themselves and their families, which is analyzed in the economic portions of this document.

### ***Economic***

#### **Analysis Indicators and Methodology**

##### **Analysis Indicators**

The Forest Plan includes a Forest-wide goal to promote the economic stability of local communities (Forest Plan page 4-9). Economic analysis indicators for this report are:

- 1) Revenue generated based on forest product value;
- 2) Employment supported; and
- 3) Potential payments to Siskiyou County.

The cost of project implementation and expected economic return in terms of dollars across alternatives, and the number of direct jobs created by alternatives, are quantifiable analysis indicators for the economic effects of alternatives.

### Methodology

The Region 5 (Pacific Southwest Region) Timber Sale Economic Evaluation spreadsheet is used to estimate costs and returns for the project. Costs of project planning are consistent across all action alternatives and are not an effect of any resource management action by the Forest Service, and will, therefore, not be considered in this analysis. Jobs will be estimated based on the assumption that one million board feet results in ten jobs directly created in the timber industry. Since volumes are discussed in hundred cubic feet, ten jobs per million board feet will be adjusted to 6.5 jobs per hundred thousand cubic feet. This estimate of direct jobs created is found in the Forest Plan and is used solely as a means to compare alternatives.

Logging costs and stumpage values fluctuate greatly with time. For this reason certain assumptions are made in this analysis. The assumed fuel for off-road diesel at the time of operations will be \$2.40 per gallon. Timber value will be estimated based on the average of 15 sales from Region 5 in the last year. Due to the uncertainty involved in final costs, the displayed values are rounded.

### ***Spatial and Temporal Bounding of the Analysis Area***

The spatial boundary for the analysis of social and economic effects is Siskiyou County because most social and economic information is available only at the county level. Although resources may come from outside this boundary, it is likely that most of the economic impact will take place within the county or the effects will be comparable in adjacent counties. The spatial boundary of analysis of timber value is limited to the project area since many factors contributing to timber value are relative to location and specific site characteristics. Short-term effects are those which occur during implementation of the project because effects on quantitative measures can be seen during this time. Long-term effects occur after project implementation with decreasing effects over time; most effects will be noticeable within 10 years of implementation.

## **Affected Environment**

### ***Existing Condition***

The project is located entirely within Siskiyou County, a large remote county located in inland Northern California, adjacent to the Oregon border. Siskiyou County has maintained relatively steady social and economic indicators in the past two decades with an average population of about 43,600 (Headwaters Economics 2016a) over an area of 6,287 square miles. Most of the population lives in small towns, ranches or farms, and lifestyles, attitudes, beliefs and values are similar to those of rural residents in other counties in the western United States (Siskiyou County 2005). Self-reliance, interdependence between neighbors and close interaction with the outdoors are important benefits of living in the County. This directly related to the use of Forest resources,

and to the desire among many residents to see the Forest resources being used to economically benefit the county (Siskiyou County 1996).

The racial distribution of the county is mostly Caucasian, with almost 86% identifying themselves as White persons; 94% identifying themselves as one race and approximately 6% identifying themselves as being of two or more races (Headwaters Economics 2016a). American Indian and Alaskan Native, Black or African American, and Asian/Pacific Islanders are the other races identified. In terms of ethnicity, about 80% identify themselves as non-Hispanic and 10% as Hispanic or Latino (of any race). Only American Indians are present in a larger percentage in the county (3% of the residents) than in California as a whole (1% of the population).

The local economy has historically been based on government, forestry, light manufacturing and tourism. About 16,000 people aged 16 through 65 are employed, non-labor income is about 58% of total personal income, unemployment is consistently higher than for the state of California or the nation as a whole, and personal income is lower. Seventeen percent of county families and 23 percent of individuals are below the poverty line (Headwaters Economics 2016a). Although manufacturing jobs (including those in forestry-related occupations) have declined since 1970 (Headwaters Economics 2016b) there are two large production sawmills operating in Siskiyou County, employing between 150 and 350 people; the woods products manufacturing segment of industry increased provides the highest wages for any private enterprise in the County (Headwaters Economics 2016c). Timber-related jobs in general are among the highest paying jobs in the County so these jobs are important to the local economy (Headwaters Economic 2016c).

### ***Desired Future Condition***

The desired future condition is driven by the need to meet the goals established by the Forest (Forest Plan, page 4-14). Forest Plan management goals with regard to economics include a sustained yield of wood products in areas capable, available, and suitable for timber production. (See Forest Plan Management Goals for MA 15 – Partial Retention Visual Quality Objective (page 4-126) and MA 17 – General Forest (page 4-131) (USDA Forest Service 1995a, as amended)).

### ***Winter 2017 Storm Damage:***

The winter of 2017 resulted in storm damage throughout the project area. Heavy precipitation caused multiple new active landslide features to develop which affected both roads and proposed treatment units within the project area. Nine new active features, mapped by the Forest Geologist, totaled about 15 acres. Storm damage was determined to be of minimal consequence to expected volume output and was not enough to affect the analysis indicators.

## **Environmental Consequences**

### ***Alternative 1***

#### **Direct and Indirect Effects**

Under this alternative no timber harvest will occur. While there will be no cost, there will also be no support of timber industry-associated jobs or economic return to the county. There will also be no other fuel-reduction treatments that improve the safety of residents in the project area. The risk of high intensity and severity wildfires will not be reduced by this alternative. There will be

no disproportionately high and adverse human health or environmental effects on minorities or those below the poverty level.

### **Cumulative Effects**

The social and economic costs and benefits of the actions considered for cumulative effects in Appendix D of the Environmental Assessment have been or are being evaluated in the environmental documentation for these actions. Adding the social and economic effects of these projects to the effects of Alternative 1 will not result in substantial social or economic cumulative effects.

### **Alternative 2**

Please see chapter 2 of the EA for a description of the proposed action.

### **Direct and Indirect Effects**

Under this alternative, treatments that provide revenue to the County would be implemented on about 863 acres. This would increase the use of resources of the project area for the benefit of Siskiyou County residents and property owners in the short term. The fire-safe character of residents, property owners or communities within or adjacent to the project area would be improved on a total of about 4,525 acres in the short term. Of these acres, 158 would be treated in the wildland urban interface, 37 would be in ridgetop fuel breaks, 2,223 in prescribed underburning, and 60 in roadside hazard removal. About 1,184 acres would be hand-piled and burned (952) or masticated (332). In the long term, fire safety is expected to be increased since dense vegetation will be thinned and the likelihood of high intensity wildfire will decrease (see the Fire and Fuels resource report for additional information). There will be no disproportionately high and adverse human health or environmental effects on minorities or those below the poverty level.

**Table 1: Social analysis indicators for Alternative 2**

	<b>Use of Resources (Acres of product removal)</b>	<b>Fire Safety (total acres treated)</b>	<b>Fire Safety in Wildland Urban Interface (acres treated)</b>
	863	4,525	158

In terms of economics, this alternative, if fully implemented, this project will yield approximately between 12,500 and 10,000 hundred cubic feet of timber. Using this volume and the value of past sales to estimate timber value, the current value of timber proposed for harvest is approximately between \$1,650,000 and \$1,300,000. The logging cost, including stump to truck, road maintenance, slash and brush disposal, and hauling as proposed would be approximately between \$1,450,000 and \$1,150,000. Table 1 below illustrates the costs and values associated with alternative 2. The values displayed are estimates and the volume and value of the timber is heavily tied to the time frame of implementation, as gas and timber prices fluctuate greatly.



**Table 2: Economic Outputs of Alternative 2**

	<b>Volume Removed (hundred cubic feet)</b>	<b>Value of Removed Timber</b>	<b>Cost of Removal</b>	<b>Net</b>	<b>Jobs</b>	<b>Potential Payments to County</b>
	12,500 – 10,000	\$1,650,000- \$1,300,000	\$1,450,000- \$1,150,000	\$200,000- \$150,000	81- 65	\$50,000- \$37,500

### **Cumulative Effects**

The social and economic costs and benefits of the actions considered for cumulative effects in Appendix D of the Environmental Assessment have been or are being evaluated in the environmental documentation for these actions. Adding the jobs created by these projects to the estimated jobs created by Alternative 2 will cumulatively help the economy of the county even though the total number of jobs created will be short term and minimal compared to the county employment as a whole. The cumulative effects of adding the economic effects of Lovers Canyon project to the economic effects of the nearby Westside Fire Recovery can have a beneficial effect on reducing costs of the Lovers Canyon Project. If the two projects are implemented during the same field season, the cost of moving equipment in and out will be greatly reduced. Adding the effects of the remaining past, present, and reasonably foreseeable future actions to the economic effects of Lovers Canyon is likely to have limited effect on the economics of this project.

### **Alternative 3**

Please see chapter 2 of the Environmental Assessment for a description of this alternative.

### **Direct and Indirect Effects**

Social impacts on the acres of product removal, acres treated for safety and acres treated in the wildland urban interface are the same as for Alternative 2. Differences in social effects between Alternatives 2 and 3 are expressed in terms of jobs and the size and value of timber resources produced as discussed and displayed under the Economics section.

As described in chapter 2 of the Environmental Assessment, Alternative 3 has the same footprint as Alternative 2, but a reduced intensity of treatment specifically in a subset of natural stands where treatment is proposed. The reduction in treatment intensity will be accomplished by modifying the percentage of each treatment unit left untreated. Alternative 2 calls for a 15% retention component in each stand treated, while Alternative 3 calls for a 25% retention component in a 25 of the 32 of the natural stands being treated with timber harvest. Subset of units applies to 91% of the acreage in natural stand treatment identified in the proposed action and would result in about 63 less acres treated resulting in an estimated 9% reduction in volume removed. Despite the reduction in acres and subsequently volume, the cost of removal of standing timber in Alternative 3 is expected to remain the same as the cost in alternative 2 due to the resulting lower volume in net acres, and decreases in production as equipment must avoid additional areas of retention.

In terms of economics, this alternative, if fully implemented, will yield approximately between 11,375 and 9,100 hundred cubic feet of timber. Using this volume and the value of past sales to estimate timber value, the current value of timber proposed for harvest is approximately between \$1,501,500 and \$1,183,000. The logging cost, including stump to truck, road maintenance, slash and brush disposal, and hauling as proposed would be approximately between \$1,450,000 and \$1,150,000. Table 2 below illustrates the costs and values associated with Alternative 3. The values displayed are estimates and the volume and value of the timber is heavily tied to the time frame of implementation, as gas and timber prices fluctuate greatly.

**Table 3: Economic Outputs of Alternative 3**

	<b>Volume Removed (hundred cubic feet)</b>	<b>Value of Removed Timber</b>	<b>Cost of Removal</b>	<b>Net</b>	<b>Jobs</b>	<b>Potential Payments to County</b>
	11,375-9,100	\$1,501,500-\$1,183,000	\$1,450,000-\$1,150,000	\$51,500-\$33,000	74-59	\$12,875-\$8,250

## Cumulative Effects

Same as Alternative 2.

## Summary and Comparison of Alternatives

Alternative 1 would not meet the purpose and need for action as described in the Environmental Assessment. Alternatives 2 and 3 would have the same effects on social values except for those described and displayed under the Economics section. Alternative 2 would more successfully meet the economic-based purpose and need for action than Alternative 3.

**Table 4: Comparison of alternatives on social analysis indicators**

<b>Indicator</b>	<b>Measurement</b>	<b>Alternative 1</b>	<b>Alternative 2</b>	<b>Alternative 3</b>
Use of Resources	Acres of product removed	0	863	863
Fire Safety	Total Acres treated (all treatments included)	0	4,525	4,525
Fire Safety	Acres treated specifically for fuel reduction and fire safety	0	2,478	2,478
Fire Safety	Acres of fuels treated in the wildland urban interface	0	158	158

**Table 5: Comparison of the economic effects of alternatives**

<b>Alternative</b>	<b>Volume Removed (hundred</b>	<b>Value of Removed Timber</b>	<b>Cost of Removal</b>	<b>Net</b>	<b>Jobs</b>	<b>Potential Payments to County</b>
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	<b>cubic feet)</b>					
<b>1</b>	0	0	0	0	0	0
<b>2</b>	12,500 – 10,000	\$1,650,000- \$1,300,000	\$1,450,000- \$1,150,000	\$200,000- \$150,000	81- 65	\$50,000- \$37,500
<b>3</b>	11,375- 9,100	\$1,501,500- \$1,183,000	\$1,450,000- \$1,150,000	\$51,500- \$33,000	74- 59	\$12,875- \$8,250

### ***Compliance with Law, Policy, Regulation, and the Forest Plan***

Programmatic management direction for the Forest is provided by the Forest Plan; a Forest Plan Program Emphasis on the Social and Economic Environment supports the promotion of economic stability of local communities through timber harvest and wood fiber extraction to the extent possible and consistent with other goals, objectives, and standards (USDA 1995, page 4-9) to the extent possible. Action alternatives are consistent with law, policy, regulation, and Forest Plan standards and guidelines as displayed in the Forest Plan Consistency Checklist, available on the project website. All alternatives comply with Executive Order 12898 on Environmental Justice and the USDA Civil Rights policy.

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